

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

**Title V
AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Draft

Permittee Name: American Fuji Seal, Inc.
Mailing Address: 1051 Bloomfield Road, Bardstown, KY 40004

Source Name: American Fuji Seal, Inc.
Mailing Address: 1051 Bloomfield Road
Bardstown, KY 40004

Source Location: *same as above*

Permit Number: V-05-007
A. I. Number: 3270
Activity ID #: APE20040001
Review Type: Title V, Construction/Operation, Synthetic Minor
limitations
Source ID #: 21-179-00031

Regional Office: Frankfort Regional Office
643 Teton Trail, Suite B
Frankfort, KY 40601
(502) 564-3358

County: Nelson

**Application
Complete Date:** January 24, 2000
Issuance Date:
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Expiration Date:

**John S. Lyons, Director
Division for Air Quality**

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**Emission Point 1 (1A&1B) Two (2) Cleaver Brooks Package Boilers**

Description: (2) – Model No. CB 436-300
12.554 MMBtu/hr (each)
Primary fuel: Natural Gas
Secondary fuel: #4 Fuel Oil (0.1% by wt. ash, 0.33% sulfur, 143,500 btu/gal)
Constructed: October 1968

APPLICABLE REGULATIONS:

401 KAR 61:015. Existing indirect heat exchangers. Applicable per Section 2(1); “Affected facility” means an indirect heat exchanger having a heat input capacity of more than one (1) million BTU per hour. Regulation is applicable to each affected facility commenced before April 9, 1972.

1. **Operating Limitations:** None

2. **Emission Limitations:**

401 KAR 61:015

- A. Section 4(3) limits visible emissions from each stack to less than 40% opacity except:
4(3)(c) For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

Compliance Demonstration Method:

(1) Compliance is assumed when the boilers are firing natural gas.

(2) See **4. Specific Monitoring Requirements**

(3) See **5. Specific Recordkeeping Requirements**

- B. Section 4(1) limits emissions of particulate matter to (0.605) pounds per million BTU actual heat input.

Compliance Demonstration Method:

(1) For natural gas combustion compliance is assumed.

PM emissions = 0.0075 lbs/MMBtu, (Reference AP-42)

(2) When firing #4 fuel oil compliance is assumed.

PM emissions = 0.05 lbs/MMBtu, (Reference AP-42)

(3) See also **5. Specific Recordkeeping Requirements**

- C. Section 5(1)(a) limits emissions of sulfur dioxide to (5.34) pounds per million BTU actual heat input.

Compliance Demonstration Method:

(1) For natural gas combustion compliance is assumed.

SO2 emissions = 0.0006 lbs/MMBtu, (Reference AP-42)

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Compliance Demonstration Method: (cont.)**

- (2) The permittee shall be able to demonstrate compliance, firing #4 fuel oil based on the following equation.

$$0.152 \times (S) / (H) < 5.34$$

where; S = Percent sulfur in fuel oil (e.g. 0.33 % = 0.33)

H = Lower heating value of the fuel oil in million BTUs per gallon.

- (3) See also **5. Specific Recordkeeping Requirements**

3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

4. Specific Monitoring Requirements:

- A. The permittee shall monitor the type of fuel burned.
- B. No specific monitoring is required when the boilers are fired with natural gas.
- C. When firing #4 fuel oil, the permittee shall perform a qualitative visual observation of the opacity of emissions from the stacks.
 - (1) Within 8-hours of stabilization after start-up on #4 fuel oil, and
 - (2) Not less than once per week while operating continuously with #4 fuel oil.If visible emissions are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then the permittee shall initiate an inspection and repair of the equipment.

5. Specific Recordkeeping Requirements:

- A. The permittee shall keep a monthly record of the type and amount of each fuel used.
- B. For each purchase of the #4 fuel oil, the permittee shall keep records the sulfur content and fuel lower heating value.
- C. The permittee shall record the dates and times when the boilers are firing each fuel.
- D. The permittee shall keep a log of the qualitative opacity observations, including the date, time and the identity of the person making the record.
- E. The permittee shall keep all records of regular maintenance and any necessary repairs to the equipment.

6. Specific Reporting Requirements:

None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**EXISTING PROCESS OPERATIONS****Emission Point 2A (2A) Silos #1-8 & 11, 12****Emission Point 3 (3) Three Railcar Unloaders**

Description: Hopper car unloading and pneumatic conveying of polystyrene and polyethylene pellets to storage silos.

Silos #1-8 & 11, 12

Shick 12 ft. diameter x 55 ft.

Maximum continuous rating: 35,000 lbs/hour.

Installed (1970)

Control Equipment: Each silo equipped with baghouse, Flex-Kleen, Model 58BV-36, 600 cfm, 300 sq ft., 16 oz. Polyester Felt, Pulse Air Cleaning

Railcar Unloaders

Each Unloader Equipped with Shick Blowers, Models 4509 and 4512

Maximum continuous rating: 17,500 lbs/hour (each), only 2 may operate at a time.

Installed (1970)

Control Equipment: Each unloader equipped with baghouse, Flex-Kleen, Model 58BV-32, 600 cfm, 250 sq ft., 16 oz. Polyester Felt, Pulse Air Cleaning

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 61 of 401 KAR commenced before July 2, 1975.

1. **Operating Limitations:** None

2. **Emission Limitations:**

401 KAR 61:020 (limits are per stack)

A. § 3(1)(a), Visible emissions shall not equal or exceed 40% opacity.

B. § 3(2)(a), Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where,

E = Emission rate in pounds per hour

P = Process weight rate (Tons/Hr.) of material unloaded

For processing rates of 1000 lbs/hr or less, the allowable emission rate is 2.58 lbs/hr.

Compliance Demonstration Method:

See **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EXISTING PROCESS OPERATIONS (CONTINUED)

3. Testing Requirements:

If deemed necessary, the Cabinet shall require testing for particulate emissions in accordance with 40 CFR 60 Appendix A, Methods 5 and 9.

4. Specific Monitoring Requirements:

- A. The permittee shall monitor the baghouse pressure drops during each unloading event.
- B. The permittee shall perform a qualitative visual observation of the opacity of emissions from the railcar unloaders and the resin silos each time the equipment is in operation and maintain a log of the observations. If visible emissions from the vents are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- C. If atmospheric conditions prevent opacity observation during an unloading event, note the ambient conditions in the log and collect only the pressure drop reading(s).

5. Specific Recordkeeping Requirements:

- A. The permittee shall maintain records of all inspections, repairs or maintenance performed on the particulate control equipment.
- B. The permittee shall record the baghouse pressure drop readings.
- C. The permittee shall record the qualitative opacity observations, and all required opacity readings determined by Reference Method 9.
- D. For each opacity observation and pressure drop reading, note the date, time and the identity of inspecting personnel.

6. Specific Reporting Requirements:

The permittee shall submit a copy of the control device inspection and repair log for those times when corrective actions are required due to an opacity exceedance, noted as required in Section B(4)(B). Copies of these records shall be submitted as a part of the semiannual reporting as required in Section F (5) & (6).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**NEW PROCESS OPERATIONS****Emission Point 2B (2B) Silo #10****Emission Point 11 (11) Scrap Handling System**

Description: Material Handling and pneumatic conveying of polystyrene and polyethylene pellets.

Silo #10

12 ft. diameter x 55 ft, Shick

Maximum continuous rating: 35,000 lbs/hour.

Installed (1980)

Control Equipment: Baghouse

Scrap Handling System

Cyclones by Cumberland, Ramco, BLOAPCO, Kirk & Blum

Maximum continuous rating: 7400 lbs/hour trim and flake scrape

Installed (1975/1976/1988/1991), Modified April 1993

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

1. **Operating Limitations:** None

2. **Emission Limitations:**

401 KAR 59:010 (limits are per stack)

A. § 3(1)(a), Visible emissions shall not equal or exceed 20% opacity.

B. § 3(2)(a), Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 3.59 \times P^{0.62}$$

Where,

E = Emission rate in pounds per hour

P = Process weight rate (Tons/Hr.) of material unloaded

For processing rates of 1000 lbs/hr or less, the allowable emission rate is 2.34 lbs/hr.

Compliance Demonstration Method:

(1) Compliance is assumed for the scrap handling system as long as the equipment exhausts inside of the building.

(2) See **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements**

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

NEW PROCESS OPERATIONS (CONTINUED)

3. Testing Requirements:

If deemed necessary, the Cabinet shall require testing for particulate emissions in accordance with 40 CFR 60 Appendix A, Methods 5 and 9.

4. Specific Monitoring Requirements:

- A. The permittee shall monitor the baghouse pressure drop each time the silo is being filled.
- B. The permittee shall perform a qualitative visual observation of the opacity of emissions from the resin silo each time the equipment is in operation and maintain a log of the observations. If visible emissions from the vents are seen (not including condensed water vapor within the plume), then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- C. If atmospheric conditions prevent an opacity observation while the silo is being filled, note the ambient conditions in the log and collect only the pressure drop reading(s).

5. Specific Recordkeeping Requirements:

- A. The permittee shall maintain records of all inspections, repairs or maintenance performed on the particulate control equipment.
- B. The permittee shall record the baghouse pressure drop readings.
- C. The permittee shall record the qualitative opacity observations, and all required opacity readings determined by Reference Method 9.
- D. For each opacity observation and pressure drop reading, note the date, time and the identity of inspecting personnel.

6. Specific Reporting Requirements:

The permittee shall submit a copy of the control device inspection and repair log for those times when corrective actions are required due to an opacity exceedance, noted as required in Section B (4) (C). Copies of these records shall be submitted as a part of the semiannual reporting as required in Section F (5) & (6).

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Point 4 (4A&4B) Wash Stations, (1) manual, (1) automatic****Emission Point 44 (44) Parts Washer****For cleaning ink from buckets, ink pans, doctor blade assemblies and various press parts****Description: Hand Wash and Industrial Washer, made by Kirk & Blum Sheet Metal**

Hand Wash (manual) – Open top; 7 ft. long x 4 ½ ft. wide x 1 ft. deep

Industrial Washer (automatic) - Closed

Parts flow first to the Industrial Washer, then to the Hand Wash for final rinse. Clean solvent is first used in the Hand Wash, and then the solvent is reused in the Industrial Washer.

Hand Wash installed 12-1982, Industrial Washer installed 1985

Control Equipment: Solvent Reclaim Stills for recycling dirty solvent. Closed

loop system. Sludge is stored in closed 55-gallon drums until the sludge is shipped off-site for disposal.

Parts Washer, Progressive Recovery Inc. Model # SWS-312

Parts washer is 48" x 48" x 84" enclosed chamber with separate solvent reservoir tank, closed loop hard piped system, parts dryer and solvent recovery systems.

Maximum estimated solvent utilization, 0.211 gallons/hr

Construction commenced, 7-22-2002

APPLICABLE REGULATIONS:

401 KAR 59:212, New graphic arts facilities using rotogravure and flexography, applies to each affected facility, which is part of a major source in a county designated attainment on which construction commenced on or after February 4, 1981. Per Section 1, a printing line consists of a series of equipment or operations including (4)(e) cleanup operations, (4)(f) leaks, spills and disposal of VOCs, and (4)(g) processing and handling of recovered VOCs.

1. Operating Limitations:

- A. Use of equipment shall be limited to press and printing facilities. Not for general cleaning or degreasing.
- B. The usage rate of raw materials in all affected facilities shall be restricted so the emission limitations set forth in Section D are not exceeded.

2. Emission Limitations:

- A. **Emission Points 4A and 4B** used with Existing Flexographic Presses, and New, Uncontrolled, Rotogravure and Flexographic Presses.

(1) **Existing Flexographic Presses** are subject only to source wide emission limits.

Compliance Demonstration Method:

The permittee shall maintain records of solvent usage and calculate the monthly VOC emissions. Monthly VOC emission totals shall be used in the source wide compliance demonstration equations of Section D.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**2. Emission Limitations (continued):**

- (2) **New, Uncontrolled, Rotogravure and Flexographic Presses** are subject to restrictions on the types of inks used.

Compliance Demonstration Method:

The permittee shall show exemption from the emission limitations in Section 3 of 401 KAR 59:212, for each new uncontrolled press by ink purchasing and usage records. Total VOC emissions from cleanup for these facilities shall be calculated for the source wide compliance demonstration equations of Section D.

B. Emission Point 44 used with New, Controlled, Rotogravure Presses.

- (1) **401 KAR 59:212, Section 3(1):** The permittee shall not cause, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than thirty-five (35) percent by weight of the VOCs input into the printing line (including clean up).

Compliance Demonstration Method:

Emissions from the Parts Washer (EP 44) shall be attributed to the New, Controlled, Rotogravure Presses, (Emission Points 43 and 47). The VOC emissions from the parts washer can be divided up as 50% for each rotogravure printing line. Alternatively, the permittee may choose to weight the percentage of emissions attributed to each printing line by using the ratio of the ink used during a given month on each of the controlled rotogravure lines. If the total VOC emissions for these facilities do not exceed 35% of the total VOCs input to the printing lines the source is in compliance. See Emission Points 43 and 47.

C. See Section D for source wide limits.

3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

4. Specific Monitoring Requirements: None**5. Specific Recordkeeping Requirements:**

- A. The permittee shall keep records of the amount of cleaning solvent purchased, along with the type of solvent, and the VOC and HAP content of each solvent.
- B. Once each month, calculate and record the VOC and HAP emitted from the wash facilities during the given month. Record the VOC emitted which shall be attributed to the New, Controlled, Rotogravure Presses (EPs 43 and 47). Record the total VOC and HAP emitted for demonstration of compliance with sourcewide limitations in Section D.
- C. The permittee shall record the amount of sludge shipped off-site. If the VOC content of the waste material is determined, by EPA test methods or a Division approved alternative, then the amount of VOC in the waste can be subtracted from the total purchased VOCs when calculating emissions. Otherwise, the VOC emitted shall be assumed equivalent to the VOC purchased and used during the month. The HAP emitted shall be assumed equivalent to the HAP purchased and used during the month.

6. Specific Reporting Requirements: See Section D.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Point 22 (22) Photopolymer Plate System
Emission Point 29 (29) PDI Platemaker

Description: Production of flexographic and offset printing plates for use with “in-house” presses.

Photopolymer Plate System

DuPont Cyrel 3001

3002 P Processor, 3002 Dryer & Light Finisher, Cyrel 3001 Dryer, Cyrel 3001 Light Finisher, Cyrel 2001 Exposure Unit

74 square feet of Polymer plate/0.5 gallon solution per hour

Installed July 25-1986

Printing Developments, Inc. (PDI) Platemaker

30 copper printing plates/hr

Installed February 15-1990

APPLICABLE REGULATIONS: NONE

1. Operating Limitations:

The usage rate of raw materials in all affected facilities shall be restricted so the emission limitations set forth in Section D are not exceeded.

2. Emission Limitations: See Section D for source wide limits.

3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

4. Specific Monitoring Requirements: None

5. Specific Recordkeeping Requirements:

The permittee shall keep records of the amount of all VOC and HAP containing materials used including etchants, cleaning solvents, etc., along with type of solvent, and the VOC and HAP content of each. Once each month, calculate and record the total VOC and HAP emitted from the platemaking facilities during the given month.

6. Specific Reporting Requirements: See Section D.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**EXISTING PLASTIC EXTRUDERS****Emission Point 6 (6D)****Polystyrene Foam Extruder #7****Emission Point 6 (6E)****Polystyrene Foam Extruder #8****Description:** **Extruder #7 – NRM**

1200 lbs/hr polystyrene pellets

Particulate Control from Raw Material Handling by Kirk & Blum Co, (5) Single Cyclones

Installed April 1975

Extruder #8 – NRM

1200 lbs/hr polystyrene pellets

Particulate Control from Raw Material Handling by Kirk & Blum Co, (5) Single Cyclones

Installed April 1975

APPLICABLE REGULATIONS:

401 KAR 61:020, Existing process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 61 of 401 KAR commenced before July 2, 1975.

1. Operating Limitations:

The usage rate of raw materials in all affected facilities shall be restricted so the emission limitations set forth in Section D are not exceeded.

2. Emission Limitations:

401 KAR 61:020 (limits are per stack)

A. § 3(1)(a), Visible emissions shall not equal or exceed 40% opacity.

B. § 3(2)(a), Particulate emissions shall not equal or exceed the emission rate determined by the following equation:

$$E = 4.10 \times P^{0.67}$$

Where,

E = Emission rate in pounds per hour

P = Process weight rate (Tons/Hr.) of material unloaded

For processing rates of 1000 lbs/hr or less, the allowable emission rate is 2.58 lbs/hr.

Compliance Demonstration Method:

Compliance with A and B is assumed as long as the equipment is exhausting inside the building enclosure.

C. See Section D for source wide limits.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**EXISTING PLASTIC EXTRUDERS (CONTINUED)****3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

4. Specific Monitoring Requirements: None**5. Specific Recordkeeping Requirements:**

- A. The permittee shall keep monthly records of the amount of polystyrene processed.
- B. The permittee shall calculate and record the monthly VOC and HAP emitted from the extrusion process using the following equations.

$$\text{VOC Emissions (lbs.)} = 0.21 * \text{PS}$$

HAP Emissions

$$\text{Styrene (lbs.)} = 0.112 * \text{PS}$$

$$\text{Ethyl Benzene (lbs.)} = 0.041 * \text{PS}$$

Where, PS = Tons of virgin polystyrene used during the month

6. Specific Reporting Requirements: See Section D.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**NEW PLASTIC EXTRUDERS**

Emission Point 6 (6A)	Polystyrene Foam Extruder #1
Emission Point 6 (6B & 6C)	Polystyrene Foam Extruders #2 & #3
Emission Point 6 (6F)	Polystyrene Foam Extruder #12
Emission Point 6 (6G)	Polystyrene Foam Extruder #13
Emission Point 6 (6H, 6I, & 6J)	Polyethylene Sheet Extruders #14, #15, & #16
Emission Point 38 (38)	Polyethylene Sheet Extruder #17
Emission Point 23 (23)	Polyethylene Foam Extruder #20
Emission Point 33 (33)	Polyethylene Foam Extruder #21
Emission Point 39 (39)	Polyethylene Foam Extruder #22
Emission Point 41 (41)	Polyethylene Foam Extruder #23

Description: **Extruder #1 – NRM, 3.5", 4.5", & 6" dia.**

1200 lbs/hr polystyrene pellets

Particulate Control from Raw Material Handling by Air Systems Engineering, (5)

Single Cyclones, (530 scfm)

Installed August 1980

Extruder #2 – Gloucester Engr Co.

1200 lbs/hr polystyrene pellets

Particulate Control from Raw Material Handling by Air Systems Engineering, (5)

Single Cyclones, (530 scfm)

Installed March 1985

Extruder #3 – Gloucester Engr Co.

1200 lbs/hr polystyrene pellets

Particulate Control from Raw Material Handling by Air Systems Engineering, (5)

Single Cyclones, (530 scfm)

Installed March 1985

Extruder #12 – Gloucester Engr Co.

1200 lbs/hr polystyrene pellets

Particulate Control from Raw Material Handling by Air Systems Engineering, (5)

Single Cyclones

Installed 1981

Extruder #13 – Gloucester Engr Co.

1200 lbs/hr polystyrene pellets

Particulate Control from Raw Material Handling by Air Systems Engineering, (5)

Single Cyclones

Installed 1981

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

NEW PLASTIC EXTRUDERS (CONTINUED)

Extruder #14 – Gloucester Engr Co., 6” Model 286-001

3600 lbs/hr polyethylene pellets and flake

Particulate Control from Raw Material Handling by Air Systems Engineering, (2)

Single Cyclones, (530 scfm & 1200 scfm)

Installed March 1985

Extruder #15 – Welex 6” Sheet Line

3600 lbs/hr polyethylene pellets and flake

Particulate Control from Raw Material Handling by Sheet Metal Co., Model C7

Single Cyclones (900 scfm) and Paper Filter (45 sqft)

Installed 1979

Extruder #16 – Davis Standard Sheet Line

1500 lbs/hr polyethylene pellets and flake

Particulate Control from Raw Material Handling by Sheet Metal Co., Model C7

Single Cyclones (900 scfm) and Paper Filter (45 sqft)

Installed April 1993

Extruder #17 – Davis Standard Sheet Line

1800 lbs/hr polyethylene pellets and flake

Particulate Control from Raw Material Handling by Sheet Metal Co., Model C7

(3) Single Cyclones (2@450 scfm, 1@1050 scfm) and Fiberglass Filter (73.6 sqft)

Installed June 1994

Extruder #20 - Windmoller & Holscher

800 lbs/hr polyethylene pellets and flake

Particulate Control from Raw Material Handling by Hydroclaim Inc. and Kirk & Blum, (6) Single Cyclones, (530 scfm)

Softal Model 3006.1 Corona Treater Discharge Unit, 2.7 kW, (343 cfm)

Installed 1987

Extruder #21 - Gloucester & O-I

750 lbs/hr polyethylene pellets and flake

Particulate Control from Raw Material Handling by (6) Single Cyclones, (450 scfm)

Enercon Industries Corona Treater, Model #AS012R-160, 8kW

Installed April 1993

Extruder #22 - Gloucester & O-I

800 lbs/hr polyethylene pellets and flake

Particulate Control from Raw Material Handling by (6) Single Cyclones, (450 scfm)

Installed January 1995

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**NEW PLASTIC EXTRUDERS (CONTINUED)****Extruder #23 - Gloucester & O-I**

800 lbs/hr polyethylene pellets and flake

Particulate Control from Raw Material Handling by (6) Single Cyclones, (450 scfm)

Enercon Industries Corona Treater, Model #AS012R-160, 8kW

Installed July 1997

APPLICABLE REGULATIONS:

401 KAR 59:010. New process operations. Applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

1. Operating Limitations:

The usage rate of raw materials in all affected facilities shall be restricted so the emission limitations set forth in Section D are not exceeded.

2. Emission Limitations:**401 KAR 59:010**

A. Section 3(1)(a) limits visible emissions from each stack to less than 20% opacity.

B. Section 3(2) limits emissions of particulate matter to 5.17 lbs/hr at the maximum rate of 3600 lbs/hour. For process rates between 1000 lbs/hr and 3600 lbs/hr, the allowable emissions should be calculated from the following equation;

$$E = 3.59 * P^{0.62}$$

Where, E = rate of emission in lb/hr

P = process weight rate in tons/hr

For processing rates of 1000 lbs/hr or less, the allowable emission rate is 2.34 lbs/hr.

Compliance Demonstration Method:

Compliance with A and B is assumed as long as the equipment is exhausting inside the building enclosure.

C. See Section D for source wide limits.

3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

4. Specific Monitoring Requirements: None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**NEW PLASTIC EXTRUDERS (CONTINUED)****5. Specific Recordkeeping Requirements:**

- A. The permittee shall keep monthly records of the amount of polystyrene and polyethylene processed.
- B. The permittee shall calculate and record the monthly VOC and HAP emitted from the extrusion process using the following equations.

$$\text{VOC Emissions (lbs.)} = 0.21 * \text{PS} + 0.06 * \text{PE}$$

HAP Emissions

$$\text{Styrene (lbs.)} = 0.112 * \text{PS}$$

$$\text{Ethyl Benzene (lbs.)} = 0.041 * \text{PS}$$

$$\text{Formaldehyde (lbs.)} = 0.0001 * \text{PE}$$

Where, PS = Tons of virgin polystyrene used during the month
PE = Tons of virgin polyethylene used during the month

6. Specific Reporting Requirements:

See Section D.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EXISTING FLEXOGRAPHIC PRESSES

Emission Point 8 (8C, 8D, 8E, 8F, 8G, 8H) Flexographic Presses using Solvent Based and Water Based Inks

Description: (6) Kidder Stacy Flexographic Presses, 36" & 45", Centraflex 660s
7.01 Gallons Ink usage per hour (Each press)
0.75 Gallons Clean-up Solvent per hour (Each press)
Between coat dryers & overhead dryers, 2.3 MMBtu/hr (each press), N.G. fired

8C installed 1972
8D installed 1980
8E & 8F installed 1976
8G installed 1975
8H installed 1974

APPLICABLE REGULATIONS: NONE

1. **Operating Limitations:**
The usage rate of raw materials in all affected facilities shall be restricted so the emission limitations set forth in Section D are not exceeded.
2. **Emission Limitations:** See Section D for source wide limits.
3. **Testing Requirements:**
Testing shall be conducted at such times as may be required by the Cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.
4. **Specific Monitoring Requirements:** None
5. **Specific Recordkeeping Requirements:**
The permittee shall keep records of the amount of inks, vanishes, extenders, additives, as well as clean up solvents purchased, along with the VOC and HAP content of each material used. Record the VOC and HAP emitted during each month. The VOC and HAP emitted shall be assumed equivalent to the VOC and HAP content of the material purchased and used during the month.
6. **Specific Reporting Requirements:** See Section D.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**OFFSET PRESSES**

Emission Point 30 (30) Contour Decorator #1, Offset Printing
Emission Point 30A (30A) Contour Decorator #2, Offset Printing

Description: Contour Decorator #1, Offset Printing
 Contour Decorator #2, Offset Printing
 Automation Equipment Inc.
 12,000 plastic carriers coated hourly (each)
 U.V. Curing Lamps
 Installed 1990 & 1991

APPLICABLE REGULATIONS:

401 KAR 50:012, General Application of Administrative Regulations and Standards is applicable to all major sources. Section 1(2) is applicable to offset printing stations, as no other administrative regulation is applicable to these facilities.

1. Operating Limitations:

- A. The usage rate of raw materials in all affected facilities shall be restricted so the emission limitations set forth in Section D are not exceeded.
- B. Use only low solvent containing inks which meet the exemptions of 401 KAR 59:212, Section 6.

2. Emission Limitations:**401 KAR 50:012, Section 1(2)**

- A. In the absence of a standard specified in these administrative regulations, all major air contaminant sources shall as a minimum apply control procedures that are reasonable, available, and practical.

Compliance Demonstration Method:

Observation of **1. Operating Limitations, B.**, constitutes compliance.

- B. See Section D for source wide limits.

3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

4. Specific Monitoring Requirements: None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

OFFSET PRESSES (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall keep records of the amount of inks, over-gloss, fountain solutions, additives, as well as clean up solvents purchased, along with the VOC and HAP content of each material used. Calculate and record the VOC and HAP emitted during each month. The VOC and HAP emitted, shall be assumed equivalent to the VOC and HAP content of the material purchased and used during the month.

6. Specific Reporting Requirements:

See Section D.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**NEW, UNCONTROLLED, ROTOGRAVURE AND FLEXOGRAPHIC PRESSES**

Emission Point 27, 28 (27, 28)	Chambon 650 Offset/Flexo Presses #14&#15
Emission Point 31 (31)	ATN Offset/Flexo Press #16
Emission Point 35, 37 (35, 37)	Chambon 650 Offset/Flexo/Rotogravure Presses #17 & #19
Emission Point 36 (36)	Chambon 650 Offset/Flexo Press #18
Emission Point 40 (40)	PCMC Flexo Press #20
Emission Point 45 (45)	Ko-Pack International 635 Flexo Press #1

Description: Chambon 650 Offset/Flexo Presses #14

Offset Printing with U.V. Inks and U.V. Curing Lamps
Water-based Flexographic Over-gloss Stations with Electric Beam Ovens
(2) Corona Treaters, Enercon Industries
3.5 KW
#14 installed Sept-1988
#15 installed April-1990

ATN Offset/Flexo Press #16

Offset Printing with U.V. Inks and U.V. Curing Lamps
Water-based Flexographic Over-gloss Station with Electric Beam Oven
Corona Treater, Enercon Industries, Model 03X-4/LM2461-03
3.5 KW, 400 ACFM
Installed 1991

Chambon 650 Offset/Flexo/Rotogravure Presses #17 & #19

1.76 Gallons Ink usage per hour (Each press)
Offset Printing with U.V. Inks and U.V. Curing Lamps
Rotogravure Printing Stations with Natural Gas Ovens
0.8 MMBtu/hr (each)
Water-based Flexographic Over-gloss Stations with Electron Beam Ovens
(2) Corona Treaters, Enercon Industries
3.5 KW, 350 ACFM (each)
EP 35 installed June 1994
EP 37 installed May 1994

Chambon 650 Offset/Flexo Press #18

1.76 Gallons Ink usage per hour
Offset Printing with Flexographic Over-gloss Station
Natural Gas Fired Over-gloss Dryer, 0.8 mmBtu/hr
Corona Treater, Enercon Industries
3.5 KW, 350 ACFM
Installed April 1994

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

NEW, UNCONTROLLED, ROTOGRAVURE AND FLEXOGRAPHIC PRESSES (CONTINUED)

PCMC Flexo Press #20

11.8 Gallons Ink usage per hour
Flexographic Printing with U.V. Inks
U.V. Lamps and Electron Beam Curing
Corona Treater, Enercon Industries
Installed January 1997

Ko-Pack International 635 Flexo Press #1

7.1 Gallons Ink usage per hour
Flexographic Printing with Water-based Inks
Installed March 2003

APPLICABLE REGULATIONS:

401 KAR 50:012, General Application of Administrative Regulations and Standards is applicable to all major sources. Section 1(2) is applicable to offset printing stations, as no other administrative regulation is applicable to these facilities.

401 KAR 59:212, New graphic arts facilities using rotogravure and flexography, applies to each affected facility, which is part of a major source in a county designated attainment on which construction commenced on or after February 4, 1981.

1. Operating Limitations:

The usage rate of raw materials in all affected facilities shall be restricted so the sourcewide emission limitations set forth in Section D are not exceeded.

2. Emission Limitations:

401 KAR 50:012, Section 1(2)

A. In the absence of a standard specified in these administrative regulations, all major air contaminant sources shall as a minimum apply control procedures that are reasonable, available, and practical.

Compliance Demonstration Method:

Use only low solvent containing inks which meet the exemptions of 401 KAR 59:212, Section 6.

401 KAR 59:212

B. Use of low solvent content inks has exempted the individual affected facilities from the VOC control requirements of Section 3.

Compliance Demonstration Method:

The presses shall continue to meet the following exemptions of 59:212, Section 6.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**NEW, UNCONTROLLED, ROTOGRAVURE AND FLEXOGRAPHIC PRESSES (CONTINUED)****Compliance Demonstration Method (cont.):****(1) Chambon 650 Offset/Flexo/Rotogravure Presses #17 & #19**

401 KAR 59:212, Section 6, Exemptions (1) applies to waterbased inks. Utilize a waterborne ink whose volatile portion consists of seventy-five (75) volume percent water and twenty-five (25) volume percent organic solvent (or a lower VOC content) in all printing units.

(2) Chambon 650 Offset/Flexo Presses #14**ATN Offset/Flexo Press #16****Chambon 650 Offset/Flexo Press #18**

401 KAR 59:212, Section 6, Exemptions (1) applies to waterbased inks. Utilize a waterborne ink whose volatile portion consists of seventy-five (75) volume percent water and twenty-five (25) volume percent organic solvent (or a lower VOC content) in all printing units.

(3) PCMC Flexo Press #20

401 KAR 59:212, Section 6, Exemptions (3) applies to UV/EB inks. Utilize inks which, excluding water, contain sixty (60) percent or more by volume nonvolatile material as applied to the substrate.

(4) Ko-Pack International 635 Flexo Press #1 - Operating Scenerio 1

401 KAR 59:212, Section 6, Exemptions (1) applies to waterbased inks. Utilize a waterborne ink whose volatile portion consists of seventy-five (75) volume percent water and twenty-five (25) volume percent organic solvent (or a lower VOC content) in all printing units.

(5) Ko-Pack International 635 Flexo Press #1 - Operating Scenerio 2

401 KAR 59:212, Section 6, Exemptions (3) applies to UV/EB inks. Utilize inks which, excluding water, contain sixty (60) percent or more by volume nonvolatile material as applied to the substrate.

C. See Section D for source wide limits.

3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

4. Specific Monitoring Requirements: None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

NEW, UNCONTROLLED, ROTOGRAVURE AND FLEXOGRAPHIC PRESSES (CONTINUED)

5. Specific Recordkeeping Requirements:

The permittee shall keep records of the amount of inks, varnishes, extenders, additives, as well as clean up solvents purchased, along with the VOC and HAP content of each material used. Record the VOC and HAP emitted during each month. The VOC and HAP emitted shall be assumed equivalent to the VOC and HAP content of the material purchased and used during the month.

6. Specific Reporting Requirements:

See Section D

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

NEW, CONTROLLED, ROTOGRAVURE PRESSES

Emission Point 43 (43) Rotogravure Printing Unit #1

Emission Point 47 (47) Rotogravure Printing Unit #2

Description: Rotogravure Printing Unit #1

10-station, Valmet Rotomec 3000-3R ES rotogravure press using solvent based inks

Maximum estimated coating usage: 52.14 gallons/hr

Natural gas fired dryer: 2.2 MMBtu/hr maximum heat input.

Clean-up solvent: 6.11 gallons/hr, Ethyl Acetate

Construction commenced: July 22, 2002

Control equipment:

MEGTEC Systems MAG-300-70-6-C, Recuperative Catalytic Oxidizer

Natural gas fired: 7 MMBtu/hr maximum heat input

Rotogravure Printing Unit #2

10-station, Valmet Rotomec 3000-3R ES rotogravure press using solvent based inks

Maximum estimated coating usage: 52.14 gallons/hr

Natural gas fired dryer: 2.2 MMBtu/hr maximum heat input.

Clean-up solvent: 6.11 gallons/hr, Ethyl Acetate

Construction commenced (estimated): June 2005

Control equipment:

MEGTEC Systems MAG-300-70-6-C, Recuperative Catalytic Oxidizer

Natural gas fired: 7 MMBtu/hr maximum heat input

APPLICABLE REGULATIONS:

401 KAR 59:212, New graphic arts facilities using rotogravure and flexography, applies to each affected facility, which is part of a major source in a county designated attainment on which construction commenced on or after February 4, 1981.

1. Operating Limitations:

A. The usage rate of materials used in all affected facilities shall be limited so as not to exceed the emission limitations listed in section B(2) below.

B. The printing operation shall be performed only when the average catalyst bed inlet temperature for all 3-hour periods is greater than or equal to the average catalyst bed inlet temperature of the catalytic oxidizer during the most recent performance test which demonstrated compliance.

Compliance Demonstration Method:

Compliance shall be demonstrated by continuously recording temperature at the catalyst bed inlet and calculating the 3-hr average operating temperature at 15-minute intervals.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

NEW, CONTROLLED, ROTOGRAVURE PRESSES (CONTINUED)

1. Operating Limitations (continued):

- C. Pressure differential across the building enclosure shall be at least 0.007 inches H₂O (0.013 mmHg) into the building enclosure during operation of printing unit.

Compliance Demonstration Methods:

Average 1-hr pressure differentials shall be calculated at least once every 15 minutes using continuous monitoring data when any printing unit is operating. If the average 1-hr pressure differentials are at least 0.007 inches H₂O (0.013 mmHg) into the building enclosure, compliance is demonstrated.

- D. To measure pressure differential between the inside and outside of the building enclosure, a differential pressure gage with a continuous recorder shall be installed.

2. Emission Limitations:

- D. **401 KAR 59:212, Section 3(1):** The permittee shall not cause, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than thirty-five (35) percent by weight of the VOCs input into the printing line (including clean up).

Compliance Demonstration Method:

The permittee shall keep records and perform calculations to show for each month that the following equation is true.

$$\text{VOC Emissions} / \text{VOC Input} \leq 0.35$$

Where;

$$\text{VOC Input} = \sum_{i=1}^p M_i C_i + \sum_{j=1}^q M_j C_i + \sum_{k=1}^s M_k C_k$$

$$\begin{aligned} \text{VOC Emissions} = & \left[\sum_{i=1}^p M_i C_i + \sum_{j=1}^q M_j C_i \right] (1-E) \\ & + \left[\sum_{i=1}^p M_i C_i + \sum_{j=1}^q M_j C_i \right] (1-D)(E) + \sum_{k=1}^s M_k C_k \end{aligned}$$

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**NEW, CONTROLLED, ROTOGRAVURE PRESSES**
(CONTINUED)**Compliance Demonstration Method: (continued)**

- M_i = pounds of material, "i" (inks, coatings, vanishes, and other solids containing materials) used during the month
- M_j = pounds of solvent containing material "j" (thinners, diluents, additives, etc.) added to the solids containing materials during the month.
- M_k = pounds of solvent containing clean-up materials "k" used during the month
- C_i = percent by weight of VOC in material, "i"
- C_j = percent by weight of VOC in material, "j"
- C_k = percent by weight of VOC in material, "k"
- p = total number of solids containing materials used in a month
- q = total number of solvent containing materials added to solids containing materials
- s = total number of solvent containing materials used for clean-up
- D = destruction efficiency of thermal oxidizer from most recent performance test
- E = capture efficiency
- $D\&E$ are expressed as decimals

E. See Section D for source wide limits.

3. Testing Requirements:

- A. An initial performance test to establish the destruction efficiency of a catalytic oxidizer shall be conducted by using appropriate EPA testing methods.
- B. The permittee shall submit a test protocol at least 60 days prior to performance testing and testing shall be conducted under representative operating conditions (contact Division representative if clarification is required).
- C. The permittee shall perform the equipment testing once in every five years.
- D. As part of continued compliance demonstration, catalyst activity shall be confirmed annually through core sampling and analysis by the manufacturer or an independent laboratory.

4. Specific Monitoring Requirements:

- A. **401 KAR 59:212** Section 4(6)(c) the amount and type of ink, and/or solvent used (including exempt compounds) at the printing press shall be monitored daily.
- B. **401 KAR 59:212** Section 4(6)(f), the amount of each cleaning solvent consumed during press cleaning at and around the line shall be monitored daily.
- C. **401 KAR 59:212** Section 4(6)(g) operating temperature of the printing press's ovens shall be monitored daily.
- D. Pressure differential across the building enclosure shall be monitored continuously when the printing press is operating.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**NEW, CONTROLLED, ROTOGRAVURE PRESSES**
(CONTINUED)**4. Specific Monitoring Requirements (continued):**

- E. The permittee shall install, calibrate, operate, and maintain a temperature monitoring device equipped with a continuous recorder.
- F. The temperature-monitoring device shall be accurate within ± 1 percent of the temperature being monitored in $^{\circ}\text{C}$ or $\pm 1^{\circ}\text{C}$, whichever is greater.
- G. The thermocouple or temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet.

5. Specific Recordkeeping Requirements:

- A. Pounds or gallons of each ink, and/or solvent used shall be recorded monthly.
- B. Pounds or gallons of each cleaning solution consumed shall be recorded monthly.
- C. The VOC percentage (by weight) or the VOC content (in lbs/gal), as appropriate for demonstrating compliance, of each ink, solvent, and cleaning solution utilized at the facility shall be recorded.
- D. A rolling 12 months summary for each month of the quarter, showing tons of VOC emitted.
- E. All purchase orders and invoices for materials containing VOCs shall be made available for inspection upon request by any duly authorized representatives of the Division for Air Quality.
- F. The temperature monitoring described above shall be recorded continuously and the 3-hour average measurements of catalyst bed inlet temperature shall be calculated and recorded every 15 minutes (3-hour periods calculations shall not include monitoring data recorded during periods of unavoidable monitoring system breakdowns, repairs, maintenance, and calibrations).
- G. The permittee shall record the pressure differential across the building enclosure.
- H. All records shall be retained for a period of five years.
- I. Also see Section F.

6. Specific Reporting Requirements:

- A. Any deviations from requirements of Section B shall be reported.
- B. The VOC emission calculation for each month in the semi-annual period shall be reported.
- C. The rolling 12-month total for VOC during each month in the semi-annual period shall be reported.
- D. See also Section D.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**CHROME PLATING / 40 CFR 63, Subpart N**

Emission Point 46 (46) Chrome Plating of Rotogravure Printing Cylinders
Preparation of new cylinders and reconditioning used cylinders
Construction Commenced: April, 2005 estimated

Description: K. Walter Mini-Pilot Plating System

Operations at this emission point consist of:

1. CFM

2. Dechrome

3. Degreasing

4. Copper Strike

5. Acid Copper Plating

6. Engraving

7. Chrome Plating

8. Chrome Polish

9. Cylinder Transport

Description

Remove Print Images, Grind & Polish
Waterbased Lubricants

Waterbased Caustic Soda

Insignificant Activity

Type 87K, Chrome Tank, 259 gallons
6.4 ft. long x 2.95 ft. wide x 1.83 ft. deep

Rectifier Capacity 4000 Amp

Insignificant Activity

Insignificant Activity

Control Equipment: KCH Spectra-U type Mist Eliminator and High Efficiency Particulate Air (HEPA) Filter

Description: Composite Mesh Filter with HEPA filter as the final stage, uses deionized water as a rinsing agent

APPLICABLE REGULATIONS:

40 CFR 63, Subpart N—National Emission Standards for Chromium Emissions from Hard and decorative Chromium Electroplating and Chromium Anodizing Tanks

401 KAR 63:020, Potentially hazardous matter or toxic substances, applies to residual chromium emissions following application of MACT.

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate emissions in Chapter 59, commenced on or after July 2, 1975.

1. Operating Limitations:

§63.343(c)(1)(ii)

A. The composite mesh-pad system shall be operated within ± 1 inch of water column of the pressure drop value established during the initial performance test, or shall be operated within the range of compliant values for pressure drop established during multiple performance tests, at any time during operation of the tank.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**CHROME PLATING / 40 CFR 63, Subpart N (CONTINUED)****1. Operating Limitations (continued):**

§63.342(f)(1)

B. Work practice standards:

1. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan described in 5(A) of this section.
2. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by paragraph 3 of §63.342(f).

§63.343(c)

- C. The owner or operator of an affected source subject to the emission limitations of this subpart shall conduct monitoring according to the type of air pollution control technique that is used to comply with the emission limitation.

2. Emission Limitations:

40 CFR 63 Subpart N, §63.342(c)(1)(i)

- A. During tank operation, the owner or operator source shall control chromium emissions discharged to the atmosphere from that affected source by not allowing the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air (6.6×10^{-6} grains per dry standard cubic foot [gr/dscf]).

Compliance Demonstration MethodSee **3. Testing Requirements** (D).

401 KAR 63:020

- B. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

Compliance Demonstration MethodSee **3. Testing Requirements** (F).

401 KAR 59:010

C. 401 KAR 59:010

- (1) Section 3(1)(a) limits visible emissions from each stack to less than 20% opacity.

Compliance Demonstration Method

Compliance with 40 CFR 63, Subpart N is sufficient to show compliance with 59:010.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

CHROME PLATING / 40 CFR 63, Subpart N (CONTINUED)

2. Emission Limitations Continued:

401 KAR 59:010

(2) Section 3(2) limits emissions of particulate matter to 2.34 lbs/hr.

Compliance Demonstration Method

Compliance with 40 CFR 63, Subpart N is sufficient to show compliance with 59:010.

3. Testing Requirements:

§ 63.343(b)

A. Within 180 days of the issuance of this permit, the owner or operator is required to conduct an initial performance test as required under § 63.7, using the procedures and test methods listed in § 63.7 and § 63.344.

B. Pursuant to Section VII 2(1) of the policy manual of the Division for Air Quality as reference by 401 KAR 50:016, Section 1. (1), the permittee shall submit a compliance test protocol at least one month prior to the projected test date.

C. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

§ 63.343(c)(1)(i)

D. During the initial performance test, the owner or operator of an affected source, complying with the emission limitations in § 63.342 through the use of a composite mesh-pad system shall determine the outlet chromium concentration using the test methods and procedures in § 63.344(c), and shall establish as a site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation, using the procedures in § 63.344(d)(5).

E. An owner or operator may conduct multiple performance tests to establish a range of compliant pressure drop values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test and accept ± 1 inch of water column from this value as the compliant range.

401 KAR 63:020

F. Within 90 days following the performance test, the permittee shall use the results from the performance test in conjunction with an EPA approved dispersion modeling program, (Screen3, ISCST3, AERMOD) to show compliance with 63:020.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**CHROME PLATING / 40 CFR 63, Subpart N (CONTINUED)****4. Specific Monitoring Requirements:****Composite mesh-pad (CMP) system**

A. Once per calendar quarter the permittee shall;

- (1) Visually inspect device to ensure there is proper drainage, no chronic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.
- (2) Visually inspect back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist.
- (3) Visually inspect ductwork from tank to the control device to ensure there are no leaks.

B. The permittee shall perform washdown of the composite mesh-pads in accordance with manufacturers recommendations.

C. The permittee shall monitor and record the pressure drop across the composite mesh-pad system once each day that the plating tank is operating.

5. Specific Recordkeeping Requirements:**Operation and maintenance plan**

A. The permittee shall prepare an operation and maintenance plan to be implemented within 60 days of issuance of this permit. The plan shall include the following elements:

1. §63.342(f)(3)(i)(A) The plan shall specify the operation and maintenance criteria for the affected source, the add-on air pollution control device, and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
2. §63.342(f)(3)(i)(B) The plan shall incorporate the work practice standards for the add-on air pollution control device or monitoring equipment, as identified in Table 1 of §63.342;
3. §63.342(f)(3)(i)(D) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and,
4. §63.342(f)(3)(i)(E) The plan shall include a systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.

B. §63.342(f)(3)(ii) If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan **within 45 days** after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**CHROME PLATING / 40 CFR 63, Subpart N (CONTINUED)****5. Specific Recordkeeping Requirements (continued):****Operation and maintenance plan (continued)**

- C. If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the permittee shall record the actions taken for that event and shall report by phone such actions **within 2 working days** after commencing actions inconsistent with the plan. This report shall be followed by a letter **within 7 working days** after the end of the event, unless the permittee makes alternative reporting arrangements, in advance, with the Division.
- D. To satisfy the requirements to provide an operating and maintenance plan, the permittee may use applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, provided the alternative plans meet the requirements of this section.
- E. §63.342(f)(2)(i) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Division, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.
- F. §63.342(f)(2)(ii) Based on the results of a determination made under paragraph (f)(2)(i) of §63.342, the Division may require that the permittee make changes to the operation and maintenance plan. Revisions may be required if the Division finds that the plan:
 - 1. Does not address a malfunction that has occurred;
 - 2. Fails to provide for the operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
 - 3. Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
- G. The permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Division for the life of the affected source or until the source is no longer subject to the provisions of Chapter 63, Subpart N. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e. superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Division for a period of 5 years after each revision to the plan.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**CHROME PLATING / 40 CFR 63, Subpart N (CONTINUED)****5. Specific Recordkeeping Requirements (continued):****H. Additional Records: §63.346(b)**

1. Inspection records for the add-on air pollution control device, if such a device is used, and monitoring equipment, to document that the inspection and maintenance required by the work practice standards of § 63.342(f) and Table 1 of § 63.342 have taken place. The record can take the form of a checklist and should identify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, and any actions taken to correct deficiencies found during the inspection.
2. Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment;
3. Records of the occurrence, duration, and cause (if known) of each malfunction of process, add-on air pollution control, and monitoring equipment;
4. Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;
5. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan required by § 63.342(f)(3);
6. Test reports documenting results of all performance tests;
7. All measurements as may be necessary to determine the conditions of performance tests;
8. Records of monitoring data required by **4. Specific Monitoring Requirements** that are used to demonstrate compliance with 40 CFR63 Subpart N, including the date and time the data are collected;
9. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment;
10. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment;
11. The total process operating time of the affected source during the reporting period;
12. All documentation supporting the notifications and reports required by § 63.9, § 63.10, and § 63.347.
13. All records shall be maintained for a period of 5 years in accordance with § 63.10(b)(1).
14. Documentation supporting the notifications and reports required by Part 6. **Specific Reporting Requirements.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**CHROME PLATING / 40 CFR 63, Subpart N (CONTINUED)****6. Specific Reporting Requirements:**

§63.347

A. Methods of Reporting:

Reports may be sent by U.S. mail, fax, another courier, or, if acceptable to both the permittee and the Division, by electronic media.

1. Submittals sent by U.S. mail shall be postmarked on or before the specified date.
2. Submittals sent by other methods shall be received by the Division on or before the specified date.

B. Ongoing Compliance Status Reports:

The permittee shall prepare a summary report to document the ongoing compliance status of the affected source.

1. The report shall be completed **semiannually** and submitted to the Division along with the 6-month reporting required in **Section F.5** unless;
2. The Division determines that more frequent reporting is necessary to accurately assess the compliance status of the source; or
3. The monitoring data shows that the emission limit has been exceeded, in which case quarterly reports shall be submitted.
4. Once an exceedance occurs, ongoing compliance status reports shall be submitted quarterly until a request to reduce reporting frequency under paragraph (g)(2) of §63.347 is approved.
5. A permittee currently required to submit ongoing compliance status reports on a quarterly, or more frequent basis, may reduce the frequency of reporting to semiannual if all of the following conditions are met:
 - a) For 1 full year, the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;
 - b) The permittee continues to comply with all applicable recordkeeping and monitoring requirements;
 - c) The Division does not object to a reduced reporting frequency for the affected source.
 - d) Procedures for reducing frequency and submittals of reports can be found in paragraphs §63.347 (g)(2)(ii) and (iii).

Contents of Ongoing Compliance Status Reports:

- (1) The company name and address of the affected source;
- (2) The beginning and ending dates of the reporting period;
- (3) A description of the type of process performed in the affected source;
- (4) The relevant emission limitation for the affected source, and identification of the operating parameter that is monitored for compliance determination
- (5) The specific operating parameter value, or range of values, that corresponds to compliance with the applicable emission limit;
- (6) The total operating time of the affected source during the reporting period;

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**CHROME PLATING / 40 CFR 63, Subpart N (CONTINUED)****6. Specific Reporting Requirements (continued):****Contents of Ongoing Compliance Status Reports (continued):**

- (7) A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes;
- (8) A certification by a responsible official, as defined in §63.2, that the work practice standards in §63.342(f) were followed in accordance with the operation and maintenance plan for the source;
- (9) If the operation and maintenance plan required by §63.342(f)(3) was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report required by §63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed;
- (10) A description of any changes in monitoring, processes, or controls since the last reporting period;
- (11) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and
- (12) The date of the report

7. Specific Control Equipment Operating Conditions:**§63.344(d)(5)**

The owner or operator of a source required to measure the pressure drop across the add-on air pollution control device in accordance with § 63.343(c) (1) through (4) may establish the pressure drop in accordance with the following guidelines:

A. Pressure taps shall be installed at any of the following locations:

- 1. At the inlet and outlet of the control system. The inlet tap should be installed in the ductwork just prior to the control device and the corresponding outlet pressure tap should be installed on the outlet side of the control device prior to the blower or on the downstream side of the blower;
- 2. On each side of the packed bed within the control system or on each side of each mesh pad within the control system; or
- 3. On the front side of the first mesh pad and backside of the last mesh pad within the control system.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

CHROME PLATING / 40 CFR 63, Subpart N (CONTINUED)

7. Specific Control Equipment Operating Conditions (continued):

- B. Pressure taps shall be sited at locations that are:
 - 1. free from pluggage as possible and away from any flow disturbances such as cyclonic demisters; and
 - 2. situated such that no air infiltration at the measurement site will occur that could bias the measurement.
- C. Pressure taps shall be constructed of either polyethylene, polybutylene, or other nonreactive materials.
- D. Nonreactive plastic tubing shall be used to connect the pressure taps to the device used to measure pressure drop.
- E. Any of the following pressure gauges can be used to monitor pressure drop: a magnehelic gauge, an inclined manometer, or a “U” tube manometer.
- F. Prior to connecting any pressure lines to the pressure gauge(s), each gauge should be zeroed. No calibration of the pressure gauges is required.

8. Alternate Operating Scenarios: None

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. (4) Corona Treaters Solo Systems SP-908-47-51 EP 12, 12A, 12B, 12C (12, 12A, 12B, 12C)	None
2. (2) Solventless Laminating Machines #1 & #2 Comexi SLC 120, w/ electric heating Installed April 1994 and April 1995 EP 34A & 34B (34A & 34B)	None
3. Printing Developments, Inc (PDI) Platemaker Etch & Develop 30 Copper Printing Plates/hr Installed Feb. 1990 EP 29 (29)	None
4. Pelletizing Extruders EP 5B, #101, Davis Standard, (1200 lbs/hr), 12-1994 EP 5A, #103, Instamelt Systems Inc., Model 168H, (700 lbs/hr), 4-1993 EP 5D, #104, Gloucester, (1100 lbs/hr), 1978 EP 5E, #105, Davis Standard, (450 lbs/hr), 1974	401 KAR 59:010 401 KAR 59:010 401 KAR 59:010 401 KAR 61:020
5. EP 42 Toray, Davis-Standard, Walton Stout Custom Built Tentering Line for the production of plastic film with a maximum PETG or Polystyrene pellet utilization rate of 1,000 lbs/hr (includes blower unload system with two cyclones; vacuum system to surge hoppers with filter; vacuum system to blenders, drying hopper, and extruder hoppers with filter; hoppers; blending systems; desiccant drying system; 2 extruders; mechanisms to stretch the extruded material; and turret winders)	401 KAR 59:010
6. R&D Lab Hood	None

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

7. Storage Tanks None
- (2) 12,000 Gallon #4 Fuel Oil Tanks
 - (1) 300 Gallon Kerosene Tank
 - (1) 250 Gallon Gasoline Tank
 - (1) 250 Gallon Diesel Tank
 - (2) 10,000 Gallon Used Solvent Tank
 - (1) 6 Ton CO2 Tank
 - (1) 10,000 Gallon Propane Tank
 - Tank #1 – 3000 Gallon - Ethyl Acetate, Wash Up – Still Bottoms
 - Tank #2 – 3000 Gallon - Ethyl Acetate, Wash Up – Reclaimed
 - Tank #3 – 3000 Gallon - Solvent Blend
 - Tank #4 – 3000 Gallon - Solvent Blend
 - Tank #5 – 3000 Gallon - Solvent Blend
 - Tank #6 – 3000 Gallon - Ethyl Acetate, Wash Up - Virgin

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. VOC and HAP emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. **Emission Limitations:**

- A. **Synthetic Minor Limitations (VOC)**

Sourcewide emissions of VOCs shall not exceed 225 tons per rolling 12 month total.

Compliance demonstration method for VOC:

Monthly sourcewide VOC emissions = \sum VOC emissions from plastic extrusion
+ \sum VOC emissions from printing
+ \sum VOC emissions from misc. operations

When the total VOC emissions from the given month are added to the previous eleven (11) month totals, the new 12-month rolling total shall not exceed 225 tons.

- B. **HAP Limitations**

(1) Sourcewide emissions of any individual HAP shall not exceed 9 tons per rolling 12 month total.

Compliance demonstration method for HAP:

Monthly HAP species emissions = \sum HAP emissions from plastic extrusion
+ \sum HAP emissions from printing
+ \sum HAP emissions from misc. operations

When the given HAP emissions from each month are added to the previous eleven (11) months the new rolling total shall not exceed 9 tons.

(2) Sourcewide total HAP emissions shall not exceed 22.5 tons per rolling 12 month total.

Compliance demonstration method for HAP:

When the total HAP emissions from each month are added to the previous eleven (11) months the new rolling total shall not exceed 22.5 tons.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

4. **Recordkeeping:**

The permittee shall keep monthly records showing the amount of each VOC and/or HAP containing material used and a summary of the total amount of VOC, individual HAP, and total HAPs emitted during the month. New, 12 month rolling totals representing the most recent year shall also be calculated and recorded. These records shall show compliance with the Synthetic Minor and Conditional Major limitations listed in this permit.

5. **Reporting:**

The permittee shall submit a **semiannual** report to the Division's Frankfort Field Office which shows the total amount of each VOC and/or HAP containing material used at the source. The report shall contain a monthly summary of VOCs and of each HAP emitted from these materials, as well as a rolling 12 month total for each pollutant. Sample calculations shall be included. This semiannual report shall be submitted with the semiannual reporting required in **Section F.5**, and the annual compliance certification required in **Section F.9**.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V) 1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within **30 days**. ***Other deviations from permit requirements shall be included in the semiannual report required by Section F.6*** [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Frankfort Regional Office
643 Teton Trail, Suite B
Frankfort, KY 40601

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS**(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - a. Applicable requirements that are included and specifically identified in the permit and
 - b. Non-applicable requirements expressly identified in this permit.
17. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of a required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)**(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, in accordance with the terms and conditions of this permit.

Emission Point 45 (45) Rotogravure Printing Unit #2

Emission Point 46 (46) K. Walter Mini-Pilot Plating System

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance test on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. *These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test.*

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.
 7. Pursuant to Section VII 1.(2 and 3) of the Policy Manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), if a demonstration of compliance, through performance testing was made at a production rate less than the maximum specified in the application form, then the permittee is only authorized to operate at a rate that is not greater than 110% of the rate demonstrated during performance testing. If and when the facility is capable of operation at the rate specified in the application, compliance must be demonstrated at the new production rate if required by the Division.
- (e) Acid Rain Program Requirements
1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- (f) Emergency Provisions
1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.
 2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 3346
Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None